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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,464	10/22/2002	Mark A. Lillis	PES-0077	5642
23462	7590	04/04/2006		
CANTOR COLBURN, LLP - PROTON			EXAMINER	
55 GRIFFIN ROAD SOUTH			WILLS, MONIQUE M	
BLOOMFIELD, CT 06002			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,464

Applicant(s)

LILLIS, MARK A.

Examiner

Monique M. Wills

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

This Office Action is responsive to the Amendment filed January 16, 2006. The objection of claim 4 is withdrawn. The rejection of claims 1-3 & 5 under 35 U.S.C. 103(a) as being unpatentable over McElroy et al. U.S. Patent 4,657,829 in view of Murphy et al. U.S. Patent 6,040,072 is overcome. Claims 1 & 6-25 have been canceled. However, claims 2-5 are newly rejected under 35 U.S.C. 103(a) as being unpatentable over McElroy et al. U.S. Patent 4,657,829 in view of Murphy et al. U.S. Patent 6,040,072.

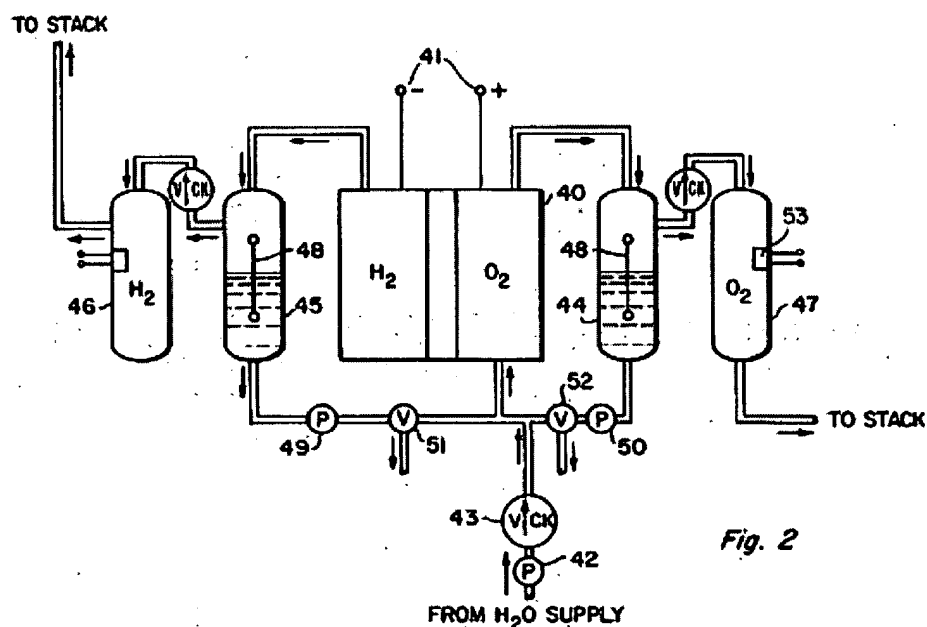
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McElroy et al. U.S. Patent 4,657,829 in view of Murphy et al. U.S. Patent 6,040,072 and further in view of Morris U.S. Patent 4,292,852.

With respect to claim 4, McElroy teaches an electrochemical cell system comprising: an electrochemical cell stack (40); a fluid containment vessel (44, 45) comprising a vessel inlet in fluid communication with a stack (40) outlet; and a vessel outlet (at 50) in fluid communication with the stack (40) inlet; wherein the vessel outlet comprises an outlet control device (52). See Figure 2. As to claim 5, the system further contains a float (48) translatably disposed in the fluid containment vessel. See Figure 2.



McElroy does not expressly disclose: an inlet control device (claim 4); a load cell disposed in operable communication with the fluid containment vessel

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(claim 4); a second load cell (claim 2); or a load cell with a compressive force measurement device (claim 3) or tensile force measurement device (claim 4).

However, Murphy teaches that it is conventional to employ load cells to obtain real time feedback on changes in the load brought about by aging of materials (col. 8, lines 45-55). As to claim 3, the load cells determine compressive force measurements (col. 8, lines 20-25).

Morris teaches that it is well known in the art to employ tensile force measurement devices in electrochemical systems, because said device makes it possible to check the electrical integrity as well as the physical integrity of the connection.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ the load cell of Murphy in the electrochemical system of McElory to obtain real time feedback on changes in load brought about by aging materials (claim 4).

Concerning an inlet control device (claim 4), it would have been obvious to one of ordinary skill in the art to employ an inlet control device to manage inlet flow to the fluid containment vessel. As illustrated in McElory, the skilled artisan practices employing flow control devices throughout electrochemical systems.

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With respect to claim 2, it would have been obvious to employ multiple load cells, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With respect to the tensile force measuring device of claim 4, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ the abovementioned device in the fuel cell assembly of McElroy, because the device makes it possible to check the electrical integrity as well as the physical integrity of the connection.

Response to Arguments

Applicant's arguments with respect to the rejection claim 1-3 & 5 under 35 U.S.C. 103(a) as being unpatentable over McElroy et al. U.S. Patent 4,657,829 in view of Murphy et al. U.S. Patent 6,040,072 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number

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is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Barr, may be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

4/03/06

MICHAEL BARR
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Michael Barr', is written over the printed name and title.